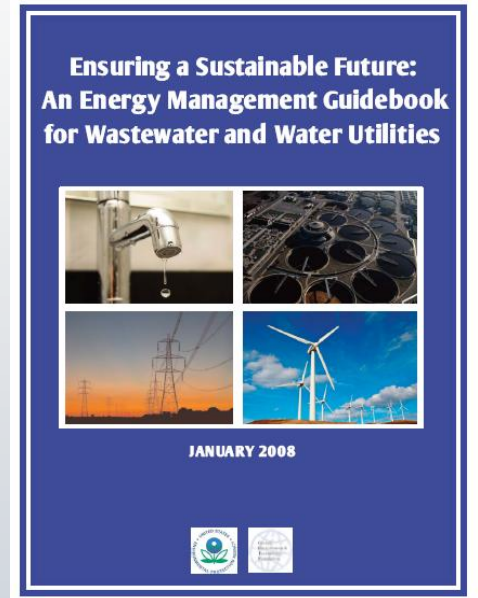


Moving Utilities toward Sustainability through Energy Management

Wastewater and water utilities across the country are facing a series of daunting challenges to improve their efficiency while keeping rates affordable for the communities they serve. Energy costs from wastewater and water services often represent 30% or more of a municipality's total energy costs. At the same time, energy represents the largest controllable cost for these utilities. Given these challenges, it is imperative that utilities utilize a systematic approach to minimize energy usage and costs while not sacrificing performance.

U.S. EPA's Office of Water and EPA's Regional offices have been working with utilities to help them understand and implement an energy management program based around a *Plan-Do-Check-Act* management systems framework as outlined in the *Energy Management Guidebook for Wastewater and Water Utilities* depicted above. EPA has sponsored a number of workshops around the country to introduce utilities to the steps contained in the Guidebook and the Regional offices are now are working with over 150 utilities to help them implement energy management programs. As a result of both operational changes and other improvements, these utilities are seeing significant benefits from their efforts. For example:



- The Greater Lawrence Massachusetts Sanitary District expects to save 45% in total energy costs and generate 410 kilowatts of green power (solar and hydro).
- The Barnstable Massachusetts Wastewater Treatment Facility expects to save 100% of their total energy costs as result of several upgrades and reduce almost 2,000 tons of CO₂.
- The Angola Indiana Wastewater Treatment Plant has reduced energy consumption by 25% and overall energy expenditures by 58%. These reductions also helped the utility avoid staff layoffs and rate increases.

EPA Region 7 has worked with a group of utilities in Missouri under the Missouri Water Utilities Partnership (MOWUP) and developed a number of case studies documenting the efforts of these utilities and the benefits they have seen.

Case Studies Index

[Missouri Water Utilities Partnership Flyer](#)

[City of Columbia](#)

[City of Harrisonville](#)

[City of Joplin](#)

[City of Neosho](#)

[City of O'Fallon](#)

[City of Rolla](#)

[City of St. Peters](#)

To access more information about MOWUP and the case studies for the participating utilities, go to <http://www.epa.gov/region7/water/si.htm> or contact Kerry Herndon at Herndon.kerry@epa.gov or (913) 551-7286.

For further information about the overall energy management project and to download a copy of the Energy Management Guidebook, go to http://water.epa.gov/infrastructure/sustain/cut_energy.cfm or contact Jim Horne at horne.james@epa.gov or (202) 564-0571.